S & S ENVIRONMENTAL SCIENCES, INC. Environmental Engineering, Testing and Consultation

98 Sand Park Rad, Cedar Grove, NJ 07009 Tel (973) 857-7188 Fax (973) 239-8380

NJDEP Lab Certification No. 07073

SAMPLE CHAIN OF CUSTODY

CLIENT	Watersx	le Construct	ion		SSES PROJECT NO.		
ADDRESS	1000 1	ectside Driv	2		TEL. NO.		
	Edganish	ec NI OZOS	0 17		FAX NO.	201 840 8812	
PROJECT	Alcan	Edgewater	NT 07	020	PROJECT	LAB ID NO. 13-152	
SAMPLE NUMBER	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	NO. OF		ALYSES REQUESTED	
	9/19/13	11:30 AM	RCA	1	PCRs. F	Attr, Petroleum HC.	
2		11:38 AM		1		· • • •	
3	9/19/13	11:30 AM				ς, σ	
Comments:	ements:	pH=		Temp.=		Flow Rate=	
Sample Prese	ervation:	Cooled at 4° C		H ₂ SO ₄		NaOH	
-		нсі		Sodium Thiosulfate		Other	
Sampled By:	VM						
RELINQUISHED BY:		RECEIVED BY:			DATE AND TIME:		
Vmcent M	ante.		Yrlr T	Che	-	9/19/13 2:1580	

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Kamii Sor, Ph.D. Yilmaz Arhan, Ph.D. Orhun Sor, P.E. Peter G. Micklus, P.E. Kenneth J. Rowbotham, P.E.

This report is the confidential property of the Client, and information contained may not be published or reproduced without our written permission.

		Construction, LLC			
Project:	Alcoa, Edg	ewater, New Jersey			
Subject:	Laboratory	Analysis of Soil and F	CA samples		*
Job No.:	13-E-29	Report Number:	13-E-255	Date:	10-08-2013

We present herewith the laboratory test results of one (1) soil and two (2) RCA samples received on September 19, 2013. The samples were collected by a representative of the Client on September 19, 2013. A copy of the sample chain-of-custody form is attached.

As requested, the samples were analyzed for Polycyclic Aromatic Hydrocarbons (PAHs), PCBs, and Extractable Petroleum Hydrocarbons (EPH). The analyses were performed by Integrated Analytical Laboratories, LLC (IAL) (NJDEP Lab ID No. 14751).

A copy of the IAL sample chain-of-custody form and a copy of the preliminary faxed IAL laboratory summary report are attached.

If there are any questions or if we can be of further assistance in this matter please call us.

Very truly yours,

Yilmaz Arhan, Ph.D. Vice President

S & S ENVIRONMENTAL SCIENCES, INC.

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Attachments: (1) Sample Chain-of-Custody Form

(2) IAL Laboratory Summary Report and Sample Chain-of-Custody Form

cc: (1) Client (Attn: Mr. Matthew Vereb)

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: S & S Environmental

Project: ALCOA - EDGEWATER

Lab Case No.: E13-09402						
Lab ID:	0: 09402-001 09402		2-002			
Client ID:	13	13-152-1		13-152-2		
Matrix:		Solid	l	Solid		
Sampled Date	9	9/19/13		9/19/13		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q MDL	
Semivolatiles - PAH (Units)	(mg	/Kg-p	pm)	(mg/K	g-ppm)	
Naphthalene	0.821	D	0.059	ND	0.020	
2-Methylnaphthalene	0.262	D	0.081	ND	0.028	
Acenaphthylene	ND		0.068	ND	0.023	
Acenaphthene	1.09	D	0.078	ND -	0.027	
Fluorene	0.992	D	0.059	ND	0.020	
Phenanthrene	8.52	D	0.064	0.152	0.022	
Anthracene	2.19	D	0.098	ND	0.033	
Fluoranthene	8.44	D	0.059	0.191	0.020	
Ругепе	8.39	D	0.072	0.192	0.025	
Benzo[a]anthracene	4.19	D	0.094	0.106	0.032	
Chrysene	3.76	D	0.066	0.103	0.023	
Benzo[b]fluoranthene	2.31	D	0.060	0.051	0.020	
Benzo[k]fluoranthene	2.04	D	0.092	0.050	0.031	
Benzo[a]pyrene	2.34	D	0.059	0.055	0.020	
Indeno[1,2,3-cd]pyrene	1.54	D	0.064	0.042	0.022	
Dibenz[a,h]anthracene	0.495	D	0.071	ND	0.024	
Benzo[g,h,i]perylene	1.67	D	0.088	0.037	0.030	
PCB's (Units)	(mg/	Kg-p	pm)	(mg/K)	g-ppm)	
Aroclor-1016	ND		0.013	ND	0.014	
Aroclor-1221	ND		0.013	ND	0.014	
Aroclor-1232	ND		0.013	ND	0.014	
Aroclor-1242	ND		0.013	ND	0.014	
Aroclor-1248	10.7	D	0.067	1.07	0.014	
Aroclor-1254	ND		0.013	ND	0.014	
Aroclor-1260	ND		0.013	ND	0.014	
Aroclor-1262	ND		0.013	ND	0.014	
Aroclor-1268	ND		0.013	ND	0.014	
PCBs	10.7	D	0.067	1.07	0.014	
NJ-EPH-C40 (Units)	(mg/	Kg-p	pm)	(mg/K)	g/Kg-ppm)	
C9-C40	285		8.74	59.4	8.74	

ND = Analyzed for but Not Detected at the MDL

D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT Client: S & S Environmental Project: ALCOA - EDGEWATER

Lab Case No.: E13-09402

Lab Case No.: E15-09402 Lab ID: 09402-003						
Client ID:	13-152-3					
Matrix						
Sampled Date	9/19/13					
PARAMETER(Units)	Conc	Q	MDL			
Semivolatiles - PAH (Units)	(mg	(mg/Kg-ppm)				
Naphthalene	6.44	D	0.426			
2-Methylnaphthalene	1.97	D	0.590			
Acenaphthylene	ND		0.497			
Acenaphthene	8.53	D	0.568			
Fluorene	8.02	D	0.426			
Phenanthrene	60.1	D	0.469			
Anthracene	15.8	D	0.710			
Fluoranthene	64.6	D	0.426			
Pyrene	62.5	D	0.526			
Benzo[a]anthracene	36.2	D	0.682			
Chrysene	32.5	D	0.483			
Benzo[b]fluoranthene	19.5	D	0.433			
Benzo[k]fluoranthene	19.1	D	0.668			
Benzo[a]pyrene	21.3	D	0.426			
Indeno[1,2,3-cd]pyrene	13.2	D	0.469			
Dibenz[a,h]anthracene	4.45	D	0.519			
Benzo[g,h,i]perylene	14.1	D	0.639			
PCB's (Units)	(mg/Kg-ppm)					
Aroclor-1016	ND		0.015			
Aroclor-1221	ND		0.015			
Aroclor-1232	ND		0.015			
Aroclor-1242	ND		0.015			
Aroclor-1248	77.8	D	0.310			
Aroclor-1254	ND		0.015			
Aroclor-1260	ND		0.015			
Aroclor-1262	ND		0.015			
Aroclor-1268	ND		0.015			
PCBs	77.8	D	0.310			
NJ-EPH-Fractionated (Units)	(mg/	(mg/Kg-ppm)				
C9-C12 Aliphatics	ND		6.32			
C12-C16 Aliphatics	13.8		6.32			
C16-C21 Aliphatics	36.4		4.21			
C21-C40 Aliphatics	188		4.21			
Total Aliphatics	238		6.32			
C10-C12 Aromatics	5.35	J	4.21			
C12-C16 Aromatics	24.9	-	4.21			
	373		4.21			
U.In-U.Z.I Aromanes	213					
C16-C21 Aromatics	561		421			
C16-C21 Aromatics C21-C36 Aromatics Total Aromatics	561 964	J	4.21 4.21			

ND = Analyzed for but Not Detected at the MDL

J = The concentration was detected at a value below the RL and above the MDL

D = The compound was reported from the Diluted analysis